

DOCKET NO. D-2002-42-2

DELAWARE RIVER BASIN COMMISSION

Discharge to a Tributary of Special Protection Waters

**Little Washington Wastewater Company
White Haven Borough Wastewater Treatment Plant Expansion
White Haven Borough, Luzerne County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an application submitted to the Delaware River Basin Commission (DRBC or Commission) by Entech Engineering Inc. on behalf of the Little Washington Wastewater Company (d/b/a Suburban Wastewater Company) on May 2, 2006 (Application), for review of wastewater treatment plant expansion project. The project's effluent limitations were approved by the Pennsylvania Department of Environmental Protection (PADEP) on October 1 2005, by issuance of the revised NPDES permit No. PA0020435. Approval of this docket is contingent upon the docket holder receiving an approved Water Quality Management Permit from PADEP.

The Application was reviewed for approval under Section 3.8 of the *Delaware River Basin Compact*. The Luzerne County Planning Commission has been notified of pending action. A public hearing on this project was held by the DRBC on September 27, 2006.

A. DESCRIPTION

1. Purpose. The purpose of this project is to expand the existing wastewater treatment plant (WWTP) from 0.45 million gallons per day (mgd) to 0.6 mgd. The expansion is proposed to accommodate wastewater flows from areas currently served by the aging Hickory Hills and Ag-Mar WWTPs, in accordance with a Consent Order and Agreement between PADEP and Foster Township. The Hickory Hills and Ag-Mar WWTPs will be abandoned upon connecting to the LWWC White Haven Borough WWTP.

2. Location. The facility is located in White Haven Borough, Luzerne County, Pennsylvania, approximately 300 feet south of Route 940 on the west bank of the Lehigh River. The project WWTP discharges to the Lehigh River, which is tributary to Water Quality Zone 1D at River Mile 183.7 – 71.9 (Delaware River – Lehigh River). The WWTP discharge is located in the drainage area of the Lower Delaware Special Protection Water Area. The Lower Delaware River has been classified as Significant Resource Waters.

The project outfall is located in the Lehigh River Watershed as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	41° 03' 34"	75° 46' 20"

3. Area Served. The docket holder's WWTP will receive wastewater flows from White Haven Borough, a small portion of Dennison Township and the portions of Foster Township served by the Hickory Hills and Ag-Mar WWTPs. For the purpose of defining the Area Served, the Application is incorporated herein by reference consistent with conditions contained in the DECISIONS section of this docket. Foster Township is the only Stormwater Phase II municipality located in the service area of White Haven Borough WWTP.

4. Physical features.

a. Design criteria. The WWTP was constructed in 1994 to provide advanced secondary treatment via a lime assisted activated sludge process. Following final clarification and disinfection, WWTP effluent is discharged to the Lehigh River. The Little Washington Wastewater Company purchased the WWTP from the White Haven Municipal Authority in 2002, and the plant was rerated from 0.34 mgd to 0.45 on November 25, 2002.

b. Facilities. The WWTP consists of a comminutor/macerator, an influent pump station equipped with three (two duty, one standby) variable-speed submersible pumps, one vortex grit removal system, one flow-splitting box, and two parallel activated sludge package plants, each consisting of concentric steel tanks. The inner tank of each package plant functions as a 64,500 gallon capacity clarifier and the outer ring is divided into a 123,000 gallon aeration zone, an 86,200 gallon aerated sludge digestion zone, a 12,400 gallon chlorine contact zone, and a cascade aeration zone.

Prior facilities and processes for the WWTP have been described in DRBC Dockets Nos. D-2002-42, and D-93-35 CP, approved by DRBC on November 25, 2002 and August 4, 1993, respectively.

The docket holder's wastewater treatment facility discharges to waters classified as the drainage area to SPW and is required to have available emergency power. LWWC's White Haven Borough WWTP has emergency power provided by dual power service with an automatic transfer switch.

The docket holder's wastewater treatment facility is not staffed 24 hours per day, and shall have a remote alarm system that continuously monitors plant operations. The existing WTP has an auto-dialer for pump failure.

**D-2002-42-2 (Little Washington Wastewater Company - White Haven
Borough Wastewater Treatment Plant Expansion)**

3

The docket holder's existing wastewater treatment facility does not discharge to Outstanding Basin Waters (OBW), and is not required to have a nonvisible discharge plume. (SPW)

The docket holder's current wastewater treatment facility has not prepared and implemented an emergency management plan (EMP). The EMP will be developed and submitted to the DRBC within six months of the docket approval. Upon approval of the EMP, the docket holder shall implement the plan.

The docket holder's expanding wastewater treatment facility is not required to provide "Best Demonstrable Technology" (BDT) as a minimum level of treatment. (SPW)

The project facilities are above the 100-year flood zone.

Wasted sludge will be hauled off-site by a licensed hauler for deposit at a (State-approved) facility.

c. Water withdrawals. The potable water supply in the project service area is provided by wells affiliated with the docket holder.

d. NPDES Permit / DRBC Docket. The NPDES Permit No. PA0020435 approved by PADEP, effective October 1, 2005, includes final effluent limitations for the project discharge of 0.45 and 0.6 mgd to surface waters classified by the PADEP as High Quality (HQ). The following average monthly effluent limits are among those listed in the NPDES permit and meet or are more stringent than the effluent requirements of the DRBC.

EFFLUENT TABLE 1A: DRBC Parameters Included in NPDES permit for Outfall 001

OUTFALL 001 (0.45 mgd Requirements)		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6 to 9 at all times	As required by NPDES permit
Total Suspended Solids	25 mg/l (85% minimum removal*)	As required by NPDES permit
Dissolved Oxygen	5.0 mg/l (minimum at all times)	As required by NPDES permit
CBOD (5-Day at 20° C)	20 mg/l (85% minimum removal*)	As required by NPDES permit
Ammonia Nitrogen (5-1 to 10-31) (11-1 to 4-30)	3.5 mg/l 10.5 mg/l	As required by NPDES permit
Fecal Coliform (5-1 to 9-30) (10-1 to 4-30)	200 colonies per 100 ml as a geo. avg. 2000 colonies per 100 ml as a geo. avg.	As required by NPDES permit

* DRBC Requirement

EFFLUENT TABLE 1B: DRBC Parameters for Outfall 001

OUTFALL 001 (0.45 mgd Requirements)		
PARAMETER	LIMIT	MONITORING
Phosphorus	Monitor & Report *	Monthly *
Total Dissolved Solids*	1,000 mg/l *	Quarterly *

* DRBC Requirement

EFFLUENT TABLE 2A: DRBC Parameters Included in NPDES permit for Outfall 001

OUTFALL 001 (0.6 mgd Requirements)		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6 to 9 at all times	As required by NPDES permit
Total Suspended Solids	21 mg/l (85% minimum removal*)	As required by NPDES permit
Dissolved Oxygen	5.0 mg/l (minimum at all times)	As required by NPDES permit
CBOD5 (5/1 - 10/31)	17 mg/l (85% minimum removal*)	As required by NPDES permit
(11/1 – 4/30)	20 mg/l (85% minimum removal*)	
Ammonia Nitrogen (5-1 to 10-31)	3.0 mg/l	As required by NPDES permit
(11-1 to 4-30)	9.0 mg/l	
Fecal Coliform (5-1 to 9-30)	200 colonies per 100 ml as a geo. avg.	As required by NPDES permit
(10-1 to 4-30)	2000 colonies per 100 ml as a geo. avg.	

* DRBC Requirement

EFFLUENT TABLE 2B: DRBC Parameters for Outfall 001

OUTFALL 001 (0.60 mgd Requirements)		
PARAMETER	LIMIT	MONITORING
Phosphorus	Monitor & Report *	Monthly *
Total Dissolved Solids*	1,000 mg/l *	Quarterly *

* DRBC Requirement

e. Cost. The overall cost of this project is estimated to be \$1,043,120.

f. Relationship to the Comprehensive Plan. The existing WWTP, formerly owned by the White Haven Municipal Authority, was included in the Comprehensive Plan via Docket No. D-93-35 CP, approved by the Commission on August 4, 1993. The WWTP was subsequently sold to the docket holder and recorded via Docket No. D-2002-042 on November 25, 2002, at which point it was removed from the Comprehensive Plan, as it was no longer operated under public sponsorship.

B. FINDINGS

An Enforcement action was taken by the PADEP on the Hickory Hills wastewater system located in Foster Township, Luzerne County, Pennsylvania. The resulting Consent Order and Agreement (COA) between Foster Township and PADEP on April 3, 2002, outlined specific obligations, including the submission of an ACT-537 Sewage Facilities Plan to address the long term wastewater management of the Ag-Mar and Hickory Hills wastewater treatment systems, which are located in Foster Township. Both the Ag-Mar and Hickory Hills wastewater treatment systems had been seriously neglected over the years and little infrastructure investment and maintenance occurred.

PADEP approved the Act-537 Plan for Foster Township in 2004. The Plan called for the Hickory Hills and Ag-Mar wastewater systems to be combined and then conveyed to the Little Washington Wastewater Company's White Haven Borough WWTP. The LWWC's White Haven Borough WWTP required expansion from 0.45 to 0.60 mgd to accommodate the added wastewater flows.

The limits in the NPDES Permit are in compliance with Commission effluent quality requirements, where applicable.

The project is designed to produce a discharge meeting the effluent requirements as set forth in the *Water Quality Regulations* of the DRBC.

In 1992, the DRBC adopted Special Protection Waters requirements, as part of the DRBC Water Quality Regulations (WQR), designed to protect existing high water quality in applicable areas of the Delaware River Basin. One hundred twenty miles of the Delaware River from Hancock, New York downstream to the Delaware Water Gap has been classified by the DRBC as SPW. This stretch includes the sections of the river federally designated as "Wild and Scenic" in 1978 -- the Upper Delaware Scenic and Recreational River and the Delaware Water Gap National Recreation Area -- as well as an eight-mile reach between Milrift and Milford, Pennsylvania which is not federally designated. The SPW regulations apply to this 120-mile stretch of the river and its drainage area.

On January 19, 2005 and September 26, 2005, the DRBC approved interim amendments to its *Water Quality Regulations* that provide increased protection for downstream waters that the Commission classifies as Special Protection Waters. The portion of the Delaware River and its tributaries within the boundary of the Lower Delaware River Management Plan Area was approved for Special Protection Waters designation.

Article 3.10.3A.2.e.1). and 2). of the *Water Quality Regulations, Administrative Manual - Part III*, states that projects subject to review under Section 3.8 of the Compact that are located in the drainage area of Special Protection Waters must submit for approval a Non-Point Source Pollution Control Plan that controls the new or increased non-point source loads generated within the portion of the applicant's service area which is also located within the drainage area of Special Protection Waters. The service area of the Little Washington Wastewater Company's White Haven Borough WWTP is located within in the drainage area to the Special Protection Waters. Since this project does entail additional construction and expansion of facilities and service areas (i.e., there are new or increased non-point source loads associated with this approval), the non-point source pollution control plan requirement is applicable at this time. Accordingly, Special Condition II.t. has been included in the Decision section of this docket.

Foster Township, which includes the Hickory Hills and Ag-Mar service areas, is regulated by PADEP as a Stormwater Phase II municipality and is permitted by PADEP as such. As of the approval date of this docket, Foster Township has not adopted and implemented a stormwater ordinance in accordance with the PADEP requirements. It is understood by the Commission that Foster Township intends to adopt the PADEP draft Model Stormwater Ordinance in order to satisfy the DRBC Non-Point Source Pollution Control Plan requirements as well as the PADEP's Stormwater Phase II requirements. The PADEP Stormwater Phase II requirements satisfy the NPSPCP requirements of the Commission. Until Foster Township adopts the required stormwater ordinance, the docket holder shall not make any connections to the Hickory Hills and Ag-Mar service areas. The docket holder is subject to Special Condition II. t. in the Decision section of this docket.

Near the project site, the Lehigh River has an estimated seven-day low flow with a recurrence interval of ten years of 39 mgd (60 cfs). The ratio of this low flow to the average design wastewater discharge (0.6 mgd / 0.93 cfs) from the expanded LWWC White Haven Borough WWTP is 65:1.

The nearest surface water intake of record for public water supply downstream of the project discharge is operated by the Hazelton City Authority on the Lehigh River, approximately 9 river miles distant. The City of Allentown and the Northampton Borough Water Authority also operate public water supply intakes on the Lehigh River downstream of the project.

The project does not conflict with the Comprehensive Plan and is designed to prevent substantial adverse impact on the water resources related environment, while sustaining the current and future water uses and development of the water resources of the Basin.

C. DECISION

I. Effective on the approval date for Docket No. D-2002-42-2 below, Docket No. D-2002-42 is terminated and replaced by Docket No. D-2002-42-2.

II. The project and appurtenant facilities as described in the Section A of this docket entitled "Physical features" above are approved pursuant to Section 3.8 of the *Compact*, subject to the following conditions:

a. Docket approval is subject to all conditions, requirements, and limitations imposed by the PADEP in its NPDES permit and Part II Permit, and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission's. Commission approval of this docket is contingent on the PADEP's approval of the NPDES permit.

b. Prior to operating the WWTP above 0.45 mgd, the docket holder shall submit the plans and specifications for the WWTP expansion to the Commission.

c. Within 6 months of the approval date for this docket, the docket holder shall submit the Emergency Management Plan.

d. The facility and operational records shall be available at all times for inspection by the DRBC.

e. The facility shall be operated at all times to comply with the requirements of the *Water Quality Regulations* of the DRBC.

f. The docket holder shall comply with the requirements contained in the Effluent Tables in the Section A.4.d. of this docket.

g. Except as otherwise authorized by this docket, if the docket holder seeks relief from any limitation based upon a DRBC water quality standard or minimum treatment requirement, the docket holder shall apply for approval from the Executive Director or for a docket revision in accordance with Section 3.8 of the *Compact* and the *Rules of Practice and Procedure*.

h. If at any time the receiving treatment plant proves unable to produce an effluent that is consistent with the requirements of this docket approval, no further connections shall be permitted until the deficiency is remedied.

i. Nothing herein shall be construed to exempt the docket holder from obtaining all necessary permits and/or approvals from other State, Federal or local government agencies having jurisdiction over this project.

j. The discharge of wastewater shall not increase the ambient temperatures of the receiving waters by more than 5°F until stream temperatures reach 50°F, nor by more than 2°F when stream temperatures are between 50°F and 58°F, nor shall such discharge result in stream temperatures exceeding 58°F.

k. Sound practices of excavation, backfill and reseedling shall be followed to minimize erosion and deposition of sediment in streams.

l. Prior to the initiation of construction of the modifications to the wastewater plant, the final plans for construction, confirming that such plans are consistent with the approved criteria, will be submitted to DRBC for review by the Executive Director. The Executive Director will review the plans promptly and furnish an approval or list of concerns to the docket holder in writing.

m. Within 10 days of the date that construction of the project has started, the docket holder shall notify the DRBC of the starting date and scheduled completion date.

n. Upon completion of construction of the approved project, the docket holder shall submit a statement to the DRBC, signed by the docket holder's engineer or other responsible agent, advising the Commission that the construction has been completed in compliance with the approved plans, giving the final construction cost of the approved project and the date the project is placed into operation.

o. This docket approval shall expire three years from date below unless prior thereto the docket holder has commenced operation of the subject project or has expended substantial funds (in relation to the cost of the project) in reliance upon this docket approval.

p. The docket holder is permitted to treat and discharge the categories of wastewaters defined in the "Area Served" section of this docket.

q. The docket holder shall make wastewater discharge in such a manner as to avoid injury or damage to fish or wildlife and shall avoid any injury to public or private property.

r. No sewer service connections shall be made to newly constructed premises with plumbing fixtures and fittings that do not comply with water conservation performance standards contained in Resolution No. 88-2 (Revision 2).

s. Nothing in this docket approval shall be construed as limiting the authority of DRBC to adopt and apply charges or other fees to this discharge or project.

t. The issuance of this docket approval shall not create any private or proprietary rights in the waters of the Basin, and the Commission reserves the right to amend,

suspend or rescind the docket for cause, in order to ensure proper control, use and management of the water resources of the Basin.

u. Prior to allowing connections from any new service areas or any new developments, including the Hickory Hills and Ag-Mar service areas, the docket holder shall require the requesting entity to demonstrate or shall independently confirm that the Executive Director has approved a Non-Point Source Pollution Control Plan (NPSPCP) for the affected service area or development in accordance with Section 3.10.3A.2.e.. Written confirmation from the DRBC staff that the new service area is in compliance with a DRBC approved NPSPCP shall satisfy this condition.

v. A complete application for the renewal of this docket, or a notice of intent to cease the operations (withdrawal, discharge, etc.) approved by this docket by the expiration date, must be submitted to the DRBC at least 12 months prior to the expiration date below (unless permission has been granted by the DRBC for submission at a later date), using the appropriate DRBC application form. In the event that a timely and complete application for renewal has been submitted and the DRBC is unable, through no fault of the docket holder, to reissue the docket before the expiration date below, the terms and conditions of this docket will remain fully effective and enforceable against the docket holder pending the grant or denial of the application for docket approval.

w. The Executive Director may modify or suspend this approval, or require mitigating measures, pending additional review.

x. The docket holder and any other person aggrieved by a reviewable action or decision taken by the Executive Director or Commission pursuant to this docket may seek an administrative hearing pursuant to Articles 5 and 6 of the Commission's *Rules of Practice and Procedure*, and after exhausting all administrative remedies may seek judicial review pursuant to Article 6, section 2.6.10 of the *Rules of Practice and Procedure* and section 15.1(p) of the Commission's *Compact*.

BY THE COMMISSION

DATE APPROVED: September 27, 2006

EXPIRATION DATE: September 27, 2011